

## **Historic, Archive Document**

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# Winter Protection

## FOR CITRUS TREES

—and— ★ FEB 24 1923 ★

## FOR TRUCKS

—Also—

## FALL PLANTING

### The Rio Grande Horticultural Association



*Eltweed Pomeroy President  
Donna, Texas*

### The Smokeless Orchard Heater

40 on an acre keeps temperature 12° to 18° higher inside than out.

50 to acre with umbrella means marketing truck in winter at higher prices.

*Waterproof Paper Bags*  
for small trees

Thermometers, Lighters, Orange Clippers,  
Pruners, and Orchard Supplies  
**PRE-WAR PRICES**

For November and Winter Planting  
Strawberries, Roses, Pecans, Peaches,  
Plums, Grapes, Evergreens, Etc.



5 GAL. CAST IRON  
Lasts Forever  
SMOKELESS HEATER

The Real Frost Insurance  
Order now and take no  
chances



The Los Angeles Rose



Etoile De France Rose, an old favorite, never beaten, dark red.



White African Lily



The Exquisite Killarney Rose  
loveliest bud of all roses



Kwanso or Double Day Lily  
blooms in spring for 2 months



Angel Lily



Confederate Lily

## *Orchard Heaters and Winter Protection*

A dormant citrus tree will stand even 20 degrees more cold than a growing one. Hence get dormancy.

From August to the end of October, water and cultivate to the limit so as to get greatest growth then. Stop in November. Plant nothing between the trees, do not water, stir the soil or even cut the weeds, do not prune. Your trees will then become as dormant as is possible.

**BANKING** Toward end of November, wash the trunks of trees with any good disinfectant,—creolinum diluted with ten parts water is one of the best—then raise the dry dirt over bud. Take down at end of February or in early March. This will save root and bud, should frost get in.

Occasionally banking right after a light frost is bad as the bark has been cracked by the frost and the gum exuding adheres to dirt, can not evaporate and soon sours and rots the bark.

**COVERING YOUNG TREES** If trees are so thoroly wrapped with corn stalks or reeds as to shut out the cold you smother the tree and it dies. If paper is thoroly tied over them, they smother.

Put your reeds, corn stalks, etc., on east, south and west leaving the north open. This shades the tree so it becomes more dormant. Have a large bunch of the fodder on ground and put on north when cold spell comes and take down after it. This is sufficient for light frosts but only heat will overcome heavy frosts.

**BAGGING** Heavy waterproof paper bags come to go completely over the smaller trees and these are put on at the approach of a cold spell and taken off right after. They are surer, better and cheaper than using corn stalks, reeds, etc. But not as good as heaters.

**NUMBER USED** Between one and two hundred thousand heaters have been sold in California and these Smokeless heaters have driven out the cruder, and older smudge pots.

**SURE FROST INSURANCE** Forty heaters to acre will keep the temperature from 14 to 18 degrees higher inside the orchard than out. As a fairly dormant citrus tree will stand a short time of 24 to 25 and as the lowest temperature I have known here has been 10, this is an absolute frost insurance.

At Mission in 1920, 40 to acre were lit one night when temperature went down to 32 and in 15 minutes they had raised the temperature to 43 or 44 degrees.

Last winter at La Granja, a few were lit early one morning and temperature raised from 28 to 38.



The Leffingwell Ranch near Whittier in California, has 32,000 trees and they formerly used coal heaters but put in 2,500 in 1919 putting them 18 to the acre with coal heaters for balance. On Christmas night, 1919, the cold set in early and they lit all the heaters. The coal heaters commenced to go out at 2 a. m. They could not refill and light and thought the grove was gone but turned on the 18 to acre full blast, kept the temperature at 29 to 32 inside while outside is was 19. They are using 31 to acre now.

The Limoniera Ranch with 700 acres in lemons, lit one night when the temperature went down to 32, raised it to 36 while outside it went down to 20.

These are so sure a frost insurance that the banks in Southern California after the big freeze of 1912, loaned orchard owners millions just to buy heaters and now an orchard owner cannot get a loan there unless he has heaters.

**ADVANTAGES** The first smudge pots were put 200 to acre and they were not sufficient for heavy freezes.

Later and more improved ones, required 150, then 100, then even 80 to acre. Of the Smokeless, 50 should be used for truck, 40 per acre for isolated citrus groves and in any good sized acreage, 30 will be sufficient, per acre.

This means quickness and ease in lighting, quickness and ease in regulating and care in summer, economy in fitting up and economy in oil use.

**THE UMBRELLA** For small trees and truck, an umbrella shaped piece goes on the stack above the combustion chamber sending the heat down to the ground. This costs a little extra but is very valuable for this use.

**USE** Use one to every 2½ or 3 trees placing a few more to north and west than on south and east. Have a few good thermometers inside and at least one outside the grove. If temperature gets down to 32 after 5 p. m., light every other heater. If down to 32 after 6 a. m. you need not light.

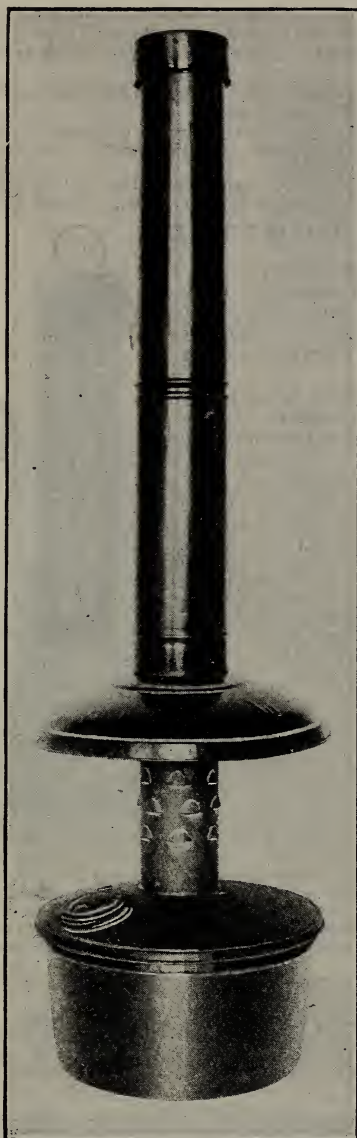
They are easily lighted. Open draft. Drop in a handful of wood ashes wet with Kerosene, squirt in a mixture of half gasoline and kerosene and light.

After burning 5 to 10 minutes at full blast turn down and then regulate according to temperature. Any time temperature rises to 32 after 5 a. m., you can put out. To do this, turn off drafts and put cover on stack.

A lighting torch comes which makes lighting easy.

**COST OF OPERATION** A gallon of fuel oil burns 2 hours on average. With 40 to acre and oil at 5c per gallon, it will cost you \$1.00 per hour per acre to operate.

**COST FOR HEATERS** Heaters etc., will cost you \$225.00 per acre at 40 to acre and if painted yearly with asphalt paint, will last 12 to 15 years or not over \$18.00 per year per acre. If you burn them for 10 hours, this means \$10.00 more and say painting and handling cost \$10.00 more making total cost \$38.00 per acre. Can you afford to be without them?



Pressed 7 Gal. Smokeless Heater  
With Umbrella for truck

**What It Is** A bowl holding oil with draft at one side that can be regulated. This draft has a deflector spreading the air over the surface of the oil and allowing a pilot light to burn vaporizing the oil. This gas goes into the combustion chamber where it is mixed with air and then burnt in that and the stack. This mixture of the gas with air causes it to burn completely utilizing all the fuel value of the oil. In other pots, from 40 to 60% of the oil goes off in smoke. Put deflector with half round toward tank.

**The Cast Iron** Heater holds five gallons. Its bowl is made of heavy cast iron and will last for years if not for centuries. It can be shut up with the cap on and left in the orchard under the trees all summer. It is hard to upset and almost unbreakable. It is much to be preferred to the pressed heater but costs more.

**The Pressed Heater** has a bowl and cover pressed from 24 guage metal, the heaviest that can be used. It holds 7 gallons. If left without painting, it will rust out in a few years but if taken in early in March and dipped in paint or oil, it will last for many years.

**Stock.** We now have ready for immediate delivery two thousand of these two heaters. It takes from one to two months to get heaters made and another month to get them here. This means that we deliver a heater to you on Dec. 1st., we should place the order Sept. 1st. Hence ORDER EARLY.

	Cast Iron	Pressed	Extra	Extra	Extra
	5 Gal.	7 Gal.	Stacks	Caps	Deflectors
Each .....	\$ 13.00	\$10.00	\$2.25	.25	\$1.00
Dozen .....	140.00	90.00	24.00	2.00	11.00
Per 100 ....	900.00	600.00	175.00	15.00	85.00
" 1000 ....	8500.00	5500.00	1500.00	135.00	7500.00

**Special Discount** Of 10% for orders before August 30th with 40 per cent cash.

**Terms** 40 per cent with order, balance on delivery. After Oct. 1st., orders only taken subject to our being able to obtain heaters in time and on such conditional orders, if we cannot deliver in time, we return the deposit.

**Delivery** At the freight station in Donna. Responsibility ceases on signing of freight receipt.

### ATTACHMENTS

**Discs** With four holes in to go into the draft hole of Canco, Sunset and other heaters to break up the air and make them burn

better—this economizes fuel. 25c each, \$2.00 doz., \$15.00 per 100.

**Umbrella Attachment** For use with truck to send heat down. See cut of 7 gal Pressed Heater. Costs \$1.25 each, \$12.00 per dozen, \$75.00 per 100.

**Lighters** A gallon container with handle and long spout for lighting quickly, \$3 each, \$30 per dozen.

**Note**—The extra stacks can be used on Canco, Golden Gate and all other heaters with a 5 inch smoke outlet opening. They turn it into a nearly smokeless heater.

**Creolinum** For painting trees before banking, curing gum diseases and killing ants. Dilute with 9 parts water. \$2 per gal.

## THERMOMETERS



No. 5400

"Knowledge is power". A difference of 2 degrees on a winter night, may mean killing the fruit buds on your grove with no crop or keeping them alive and a good crop.

If you intend to protect your grove with heaters, you must know exact temperatures in times of frost.

On a cold night of a recent winter, six thermometers were scattered thru a grove. They did not register alike. Locations were changed but they still varied. They were brought to one place and there was a variation of from 2 to 5 degrees. They cost from 50 to 75 cents from reputable dealers.

No provisions had been made for the shrinking of the glass tubes after they had become cold.



No. 5452

Also they had probably been tested for one point probably 60 degrees and then fastened to a printed scale and they were fairly accurate for moderate temperatures but inaccurate for low temperatures.

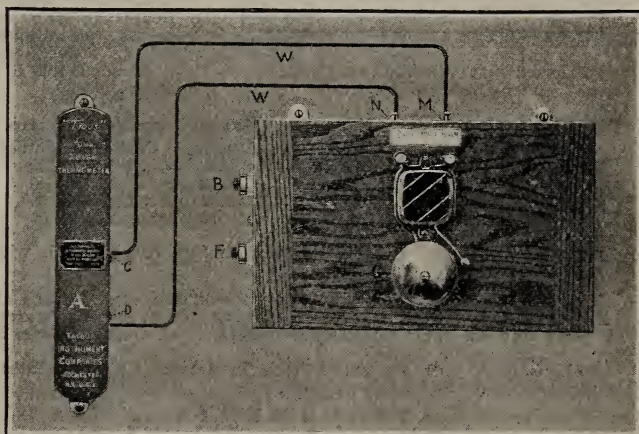
The U. S. Bureau of Standards will not certify a thermometer accurate unless the glass has been aged for eighteen months.

TYCOS THERMOMETERS are made by the largest manufacturers of thermometers, barometers and other meteorological instruments in the world. The tubes of all Tycos-Quality thermometers are thoroughly "aged" to insure permanent accuracy. When thus aged, they are put into test baths with standard thermometers which have been certified by the U. S. Bureau of Standards and marked on the glass with a fine scratch, usually at 32°, 62°, and 92° F. Some are also tested at 0° F. Each metal scale on which one of these "aged" and "tested" thermometers is to be mounted, is graduated and marked according to the test points on its own tube. This means that a different and individual scale is made for each thermometer.

This means permanent accuracy and real economy altho not the low price of instruments made without this accuracy.

**No. 5430 S \$1.25 each, \$12.00 Doz., 6 inches long.**

The magnifying glass tube is filled with red, non fading and easy-reading permacolor and mounted on a black scale with white figures. It is not a Tycos-Quality thermometer but serves the



No. 6067 Frost Alarm Thermometer



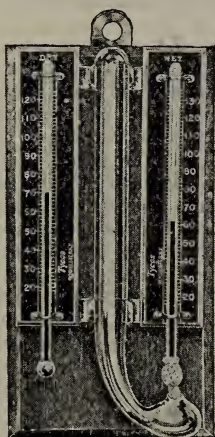
purpose fairly well for general use if checked up occasionally to a thermometer of known accuracy.

**No. 5400 \$2.40 each, \$24.00 Doz.**

A Tycos-Quality thermometer to be depended on for accuracy 8 inches long, mercury-filled. finished in black enamel with white graduations.

**No. 5500 \$2.40 each \$24.00 Doz.**

The Tycos-Quality glass tube of this thermometer is made with an index in its bore which stays at the coldest point reached since last set. If set at night, it will tell in the morning, the coldest point reached during the night. This is a very low price, When present stock is exhausted, I cannot sell at these prices.



**No. 5537 Hydrometer**

Complete except for the wire which can be purchased anywhere as long as is needed.

Any number of thermometers can be connected with a common battery box and bell giving warnings from as many parts of the orchard as there are thermometers.

This is a seasonable instrument. They are not kept in stock all the year around. They should be ordered before Sept. 15th. We will try to fill later orders but do not guarantee. Order early.

**No. 8000 \$75.00 each.** A handsome instrument about 11 inches in diameter with lugs to fasten to wall. It makes an ink record on a nine inch paper chart of all temperatures for seven days. Fifty-two charts make a permanent record for a year.

**No. 5532 \$6.00 each, \$60.00 Doz.** Hygrometer. This tells the humidity and dew point. It foretells frost five hours in advance. Look at it at 10 p. m., again at 2 or 3 a. m. and if no frost is indicated, go to sleep with no cause to worry.

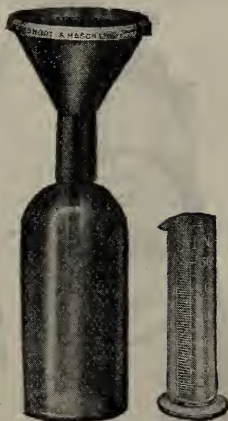
**No. 2224 \$16.00 each.** Barometer. A rising barometer indicates fair weather, a falling barometer indicates storm. They

**No. 5452 \$8.00 each \$8.00 Doz.**

"Sixe's" Maximum and Minimum Registering Thermometer' There are two indexes in the two tubes of this thermometer. These are set by a magnet. Whichever way the temperature varies, this will show the maximum of heat and minimum of cold during that time. Interesting at all seasons. The heavy tin case is 10 inches long black with white figures.

**No. 6067 \$50.00 each.**

This thermometer is housed in a heavy metal case with lugs to attach to a post in the grove. Wires connect it with a bell in the house which rings till stopped when the outside temperature reaches 32 F (or any degree desired when ordering.) You



**No. 2763 Rain Gauge**

**No. 2224 \$16.00 each.** Barometer. A rising barometer indicates fair weather, a falling barometer indicates storm. They



No. 2200 Barometer

foretell to-morrows weather. The mechanism of this delicate instrument is housed in a 5 inch lacquered brass case with its dial protected by heavy beveled plate glass.

**No. 2703 \$13.50 each.** Howard Rain Gauge. This shows the inches and fractions of an inch of a rainfall. This is of great value in determining irrigation.

Write for information regarding any other meteorological instruments desired.

## Waterproof Bags

One and usually two-year trees lack foliage to hold heat. These can be banked at cold spells and so covered that frost will not injure them. We have had bags made from two thicknesses of kraft paper with waterproofing in center. These are glued with waterproof glue and stayed at bottom with flaps to spread on ground to put dirt on. We had them on small trees, four times last winter, though they were not needed at all. They are now stored for use next winter. Two men can easily cover an acre an hour with these bags if branches are tied up early in winter. Prices are:

	Per Doz.	Per 100	Per 1000
18x17 in. medium weight.....	\$2.50	\$17.50	\$160.00
30x42 in. medium weight....	4.25	32.50	300.00
36x48 in. medium weight....	5.00	40.00	375.00
36x48 in. heavy weight....	6.50	50.00	475.00
42x54 in. heavy weight....	7.50	60.00	550.00

**Discount** 10% for orders before August 30th with 40% cash. Another 2% for all cash. Delivered at once

## Spray Machines

Young trees rarely need spraying here but a two or three year grove does need spraying and it is far easier to begin early and keep it clean than to wait for a bad infestation

Brown's Auto sprayers have been used on La Granja Farm for ten years. They are good. There may be lower-priced machines but there are no cheaper machines.



**Auto Spray No. 1** The standard for twenty years. Over 600,000 in use. It is the strongest and most simple of any compressed air sprayer. Two pumpings of about 15 strokes will discharge the contents under high and constant pressure. Nothing to do then but direct the spray.

Height 2 feet, Diameter 7 in., Capacity  $3\frac{1}{2}$  gals. Weight empty 9 lbs " loaded 36 lbs " shipping 11 lbs Price \$13.50 each. With Auto-Top nozzle.

Auto-Top nozzle separate \$2.25 each Two foot brass extension tube, 75c extra, Brass elbow for use in getting under, 50c. Brass Strainer, \$2.



It consists of a heavy, sheet brass tank holding 3½ gallons. A brass pump whose cylinder is made of seamless tubing is inside and provided with a cam locking device which closes the filler opening air tight with a half turn of pump handle.

The entire machine is made without screws or bolts. The valves and washers resist oil and other solutions that attack rubber.

The nozzle does not clog and is operated with one hand.

Wheel-barrow Sprayer No. 40 C. Capacity 12 gals., Pump of displacement type, graphite packing. No leather cups. Plunger brass 1½ inches diameter, 5 inch stroke. Brass ball valves, Suction pipe fitted with brass strainer. Price \$45. Other sprayers and dusters quoted on application

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## *Budding Trees & Expert Work*

Every grove owner should know budding, pruning and all orchard work even if he has others to do the actual work. To that end, we sell the best books containing full directions.

But there is nothing like actually doing it and seeing it done. Not everyone can do rapid and profitable budding. The man whose fingers are such he cannot do first class carpentering, can rarely become an expert budder while the expert cabinet maker will quickly learn it.

Arrangements have been made with two expert budders to do work for the R. G. H. A. and they will gladly show grove owners how when working.

**TIME TO BUD** Budding can only be done successfully when the sap is rising. If trees are nearly dormant as usual in winter and often in hot, dry times in summer, the bud will not stick.

It is always well to irrigate one or two weeks before budding and cultivate as soon after as possible. This starts the tree growing. It is usually not well to bud late in fall as the newly started tree is more tender and suffers from lighter frosts than one which has grown some time. The best time is from the end of February to middle of May or if trees are well irrigated and cultivated, till beginning of July. Then again in September and on.

**AFTER VISITS** After the bud is inserted and covered, the tree must be visited a second time in from one to two weeks, the wraps taken off and the few which did not take, rebudded. Shortly after, the tree is cut half off and bent over. As soon as the bud has gotten a growth of one or two inches, the tree is cut completely off above the bud and a stake is stuck in the ground beside it to which it is tied to make straight trunk till the heading is made a 28 to 30 inches from the ground. t

**BUDWOOD** Your own budwood used if you wish. If not budwood cut from firstclass bearing trees at prices agreed. If the budwood cut by the California Citrus Growers Association from specially selected trees, is wanted, it will cost about 10c a bud. Specially fine budwood cut by experienced men from heavy bearing trees in Florida, can be obtained at slightly lower prices.

**CHARGES** Nothing less than \$5.00 and traveling expenses.

For 100 trees or over in nursery rows and cleaned of small branches for a foot from ground, 10c per tree and traveling expenses.

For 1000 trees and over, 7c per tree and traveling expenses.

For frozen back trees and others which have come up from root in orchard form, 25c per tree and traveling expenses if trees are pruned so work can be done expeditiously.

For fancy budding of two or more kinds on a tree and for pruning \$2 00 per hour for two men and traveling expenses.

The budding includes a second visit to take off wraps and rebud the few that do not stick. But it does not include cutting off tops and training trees.



# Tools For Pruning

## BUDDING AND PRUNING KNIFE

2 S 154—One large pruning and one small spaying blade half crocus polished and etched. Length four inches, each \$1.75.



## PRUNING SAW

D E 100—Finest spring steel blade, polished and etched, applewood handle. The reversed teeth cut on the draw stroke, making overhead pruning much less fatiguing. Length 14 inches. Each .....\$1.25

Keyhole Saw cuts on push stroke .....\$1.25



23 AND 24

## PRUNER No. 23

Most durable and easiest cutting pruner, very powerful, cuts clean. Weighs only 7½ ounces, but will cut ½-inch dry oak. A ladies' size. and fine for cutting fruit from trees. Each.....\$1.10

## PRUNER No 24

Larger size, weighs 13 ounces, and will cut ¾-inch dry oak. You can cut up to size of jaws. Easily sharpened. Each.....\$1.35

## PRUNER CALIFORNIA

No. 30—Black finish, fine stock. Length 9 inches. Volute spring. Each.....\$1.10



California Pruner

## ROCKDALE No. 35 PRUNING SHEARS

Can get into center of tree with these and will cut 1¼-inch stick with ease. Length 26 inches. Each.....\$2.00

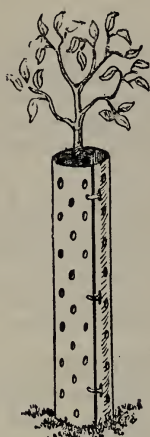


Large Clipper No. 35

HEDGE SHEARS—D E H 9. Forged from highest grade tool steel. Blade 9 inches long and 12-inch hickory handles. Each.....\$3.50

ORANGE CLIPPERS For cutting fruit so there will be no edge to bruise the skin of others \$1.50 each. \$15.00. doz.





Tree Protector  
water, 1 lb. 50c, 5 lbs. \$2.50.

## Orchard Supplies

**Expan tree protectors**—18" high, \$2.75 per 100, \$25 per 1000.

**Creolinum**—For washing tree trunks for winter and remedy gum disease. to kill ants and prevent rabbits, etc., from eating bark. Full strength will not injure bark but dilute with 9 parts water, \$2 per gal. can, \$8 per 5 gal. can.

**Arsenate of lead**—\$3 per lb., \$12.50 for 5 pounds.

**Paris Green**—\$2.25 for 4 1-2 packages.

**Bordeaux Powder**—1 lb. \$1. 5 lb. \$2.50, 4 lbs. to 25 gals. water.

**Dry Lime Sulphur**—8 to 10 table spoon-fuls to 1 gal water, 2 to 3 lbs to 50 gal. water, 1 lb. 50c, 5 lbs. \$2.50.

**Whale Oil Soap**—For Kerosene Emulsion 25c pound.

**Carbon Bisulfide**—(High Life) for killing Rhinoceros Beetles on Palms, 25c pound.

**Dry Sulphur**—1 lb. 10c, 60 lbs. 60c.

**Dry Copper Sulfate**—1 lb 25c, 10 lbs \$2.00

**Raffia**—For tying trees and bundles Better and cheaper than twine Hanks of about 2 lbs. 50c lb.

**Tree Labels**—3 1-2" long iron wired but with our name on, 50c per 100, \$4.50 per 1000.

**Bamboo Stakes**—3'-4' long for tying young trees \$1.75 per 100, \$10 per 1000; 6'-7' long for tying young trees \$3 per 100; \$15 per 1000.

### BOOKS

For description of all but new plants **THE RIO GRANDE PLANT BOOK**, price 25c.

For booklet, "PRUNING" send 10c.

**CITRUS FRUITS** by Dr. J. Eliot Coist, of University of California Price \$3.25, 520 pages.

"**CITRUS FRUITS AND HOW TO GROW THEM**," by Prof H. Harold Hume of Florida, 587 pages. price \$2.85. Hard to get.

"PRUNING," by M G. Kains, price \$2.75.

"THE PRUNING MANUAL," by L. H. Bailey, price \$3.25.

"THE PECAN," by H. Harold Hume, 192 pages, \$2.50.

**OTHER BOOKS** named on request and obtained.

### Paper Subscription Taken—

The Citrograph, monthly \$1.00 per year.

The Florida Grove, weekly \$1.50 per year.

## STRAWBERRIES

Up north you plant strawberries in rows 4 feet apart and 2 feet apart in the rows, they cover the ground with runners and eighteen months later, you get berries. You use 8 square feet to a plant and get about 5,000 plants to the acre and usually have a season of less than a month.

Here you plant in November or December and if the patch is small and you cultivate by hand, you plant in rows a foot apart and 10 to 12 inches apart in the rows and you plant forty to forty-five thousand to the acre. If you cultivate by mule, you make your rows 2 feet apart and plant 10 to 12 inches in the row and use twenty thousand to the acre.

Some make rows 3 feet apart, then flatten the row on top and put two rows of vines on each row occasionally cultivating between them with a hand cultivator and getting same number to acre.

These plants commence to bear in six to eight weeks and bear abundantly till May. They make no runners till bearing is over and then the bearing is so abundant and long that the vitality of the plant is exhausted and you had better plow them up and get new plants the next fall.

The conditions for success are:

1. A mellow soil thoroly worked before planting is done.
2. First class plants and properly planted.
3. With a sharp knife, cut off about a third of the roots, then with a flat trowel, make a wide hole, spread out the roots and insert and press the soil back again. If two are planting, a spade can be used. If irrigation water does not follow at once, put a pint on each plant as you plant and irrigate soon.
4. Frequent cultivation and frequent irrigation are necessary but in irrigating do not let the water come up around the plant.
5. Stable manure worked into the soil increases yield greatly.

Inasmuch as our fruit goes onto the market when there is none other, the prices obtained run from 25 to 50c a quart basket or from \$8.00 to \$16.00 a 24 basket crate. In other places, big money is made at \$2.50 a crate and good money at \$1.50. The local market has never been supplied and there is good money in raising strawberries. But an acre will need the work of one man all the time with intelligent over-sight and in picking time from 6 to 10 pickers. Do not plan for a large patch unless you are ready to play the game right.

**VARIETY.** We have tried and seen tried a number of varieties and there is none which equals the Klondyke, a large firm berry, good shipper and good flavor. The plants have dark green foliage, rustless and handsome. It is an early and prolific bearer. It is the only kind we will carry.

Our plants come from a northern grower from whom we have had plants for years and uniformly good plants. They will arrive about November 10th and after Christmas we will only bring in on order.

**PRICE** Klondyke plants \$1.00 per 100, \$3.50 for 500, \$5.00 per M. and in ten thousand lots \$4.50.

## BULBS

Can be planted at any time but if planted in November or December, sure to flower next spring or summer.

**ANGEL** (*Crinum Fimbriatum*) Clear white with faint streak pink down petals. Flowers after every rain or irrigation.

**MILK AND WINE** (*C. Sanderianum*) Trifle smaller but creamy white with stripe rich carmine down center. Fragrant.

**SPIDER** (*Hymenocallis Carribacum*) Pure white with green center and curious rayed petals. Fragrant.

**PRICE** Three above 25c each, \$2.50 dz., \$15.00 per 100.

**CONFEDERATE** (*C. Kunthianum*) Larger with leaves 3½ to 4 feet long and cluster trumpet-shaped flowers of soft white, striped with dull but rich rose.

**ORINOCO** (*C. Kirkii* or *Ornatum*) Same as above but flowers open wide some 7 inches across with stripes of deep carmine.

**SOUTH AFRICAN** (*C. Capense Alba*) Flowers are an almost duplicate of Easter Lily but flowers later and oftener.

**PRICE** Three above 35c each, \$3.00 dz., \$20.00 per 100.

**LILY OF THE VIRGIN** (*C. Virginicum*) Flowers pure white with faintest stripe of delicate pink down center. Open wide and very lovely. Fragrant.

**LILY OF THE DAWN** (*C. Harveyii*) Same but flowers a delicate rose pink over all.

**PRICE** Two above 75c each, \$7.50 dz.

**LILY OF ASIA** (*C. Asiaticum*) Immense plant requiring 5 feet circle. Flower stalk has 30 to 40 buds similar to Spider Lily but stiffer rays and very striking. Pure white and fragrant.

**GREAT MOGUL or RIO GRANDE LILY** (*C. Augustum*.) Even larger than preceding and flower stalk has often fifty buds opening in a long-petaled lily very striking. Fragrant. Flowers in cooler weather than others.

**PRICE** Two above \$1.50 each, \$15.00 dz.

**DAY LILIES** (*Hemerocallis*) Old-fashioned but always lovely flowers which though they only last a day, have so many buds on a stalk that the flowering season extends from May into July. Easy growth with grass-like foliage making a pretty border.

**TAWNEY DAY LILY** (*H. Fulva*) Stalks from 1 to 2 feet high, flower 4 to 6 inches across, a golden-yellow in throat melting suddenly to tawney-orange-brown shading lighter at crinkled edges with fine line of yellow down throat.

**YELLOW DAY LILY** (*H. Flava*) Same as above but solid golden yellow.

**PRICE** Two above 20c each, \$2.00 pr. dz. \$15.00 per 100.

**KWANSO OR DOUBLE LILY** (*H. Fulva Flora Plena*) Same but double and exceedingly lovely in its many voluted petals.

**PRICE** 30c each, \$3.00 dz., \$20.00 per 100.

**TUBEROSES** Single Mexican (*Polianthes Tuberosa Mexicana*) Few know the value and beauty of this lovely flower with its tall, stiff stems and cluster of pure white, single, very fragrant flowers which open



here in sun. They thrive on our soil. Flower increases in size and whiteness if cut and kept in house and will keep for a week or ten days.

**PRICE** Large bulbs 20c each, \$2.00 pr. dz., \$15.00 per 100.

**FAIRY LILIES** (*Zephyranthes Rosea*) Dainty little plants coming up with grass like foliage and flowers of loveliest pink.

**PRICE** 20c each. \$2.00 dz. \$15.00 per 100.

For cuts see inside front cover.

## ROSES.

See Cuts on Outside and Inside front Cover

**NEVER**

Have we offered such carefully-selected, Delta-adapted varieties.

Have we been able to secure such strong, two-year, Field-grown plants.

Have our facilities for handling and delivering fine plants been so good.

### AND AT PRE-WAR PRICES

Nothing but the finest Teas, (T) Hybrid Teas (H. T.) and Perpetuals (P) in this list.

Exclusive agent for the McKEE Grafted, non-sprouting roses, Texas-grown.

**PRICES** Before Feb. 15th, bare root or boxed plants 60c each, \$6.00 dozen, \$45.00 per 100.

After Feb. 15th, Balled plants 75c each, \$7.50 dozen, \$55.00 per 100.

The dark roses grow sturdier, bloom freer and are more satisfactory than the lighter shades. Hence we recommend getting more dark shades.

**DARK REDS** Etoile de France, H. T. Velvety, dark crimson, large cup flowers. Black Prince, H. P. So dark a red as nearly black.

**REDS** Red Radiance, H. T. Clear, non-fading red, large, double bloom. Madame Masson, H. T. Massive, full flowers of intense crimson. J. J. L. Mock, H. T., Carmine inside, flesh pink outside. Wonderful.

**PINKS** Radiance, H. T. Large, cup-shaped, soft carmine pink flowers. Killarney, H. T. Very long, pointed silvery pink buds. Fragrant. LaFrance, H. T. Pink with silvery blush. An old favorite. Pink Cochet, T. Deep rose pink lighter in center. Large flower. Paul Neyron, H. P. The largest rose grown. A delightful pink. American Beauty, H. P. Deep rose, large cup-shaped flowers.

**WHITES** Kaiserin, H. T., White faintly yellow, long pointed buds. White Cochet, T. White with outer petals blushed. Largest Cochet, Frau Karl Drouschki, T., Large, cup buds of creamy white.

**SALMON** Madame Abel Chatenay, H. T., Rosy carmine tinted salmon. Mrs. A. R. Waddell, H. T. Orange-pink with outer petals flesh. Sunset, T. Golden Amber with faint ruddy tinge. Very fine.

**YELLOW** Luxenburg or Sunburst, H. T. Yellow shaded copper-orange. Magnificent.

**APRICOT** Lady Hillingdon, T. Unique deep apricot yellow unshaded.

**FLESH** Antoine Revoire, H. T. Silvery flesh with salmon center, Rosette.

**THREE SPECIAL ROSES** \$1.00 each, \$10.00 dozen, \$75.00 per 100.



**LOS ANGELES H. T.** A magnificent rose. Color a luminous flame-pink shaded with translucent gold at base. Buds long and pointed. Fragrant.

**OPHELIA H. T.** Salmon flesh shaded with rose. Buds long and pointed of exquisite shape and color.

**HOOSIER BEAUTY. H. T.** Color a rich, dark velvety red and flowers of superb form not unlike a sunburst. Beautiful in bud or full bloom.

**TIME TO PLANT** These roses are to arrive the end of November. We advise planting then and in December. They will be cut back to a foot from the ground and if given good care, will blossom in 4 to 6 weeks and your best blossoms will come before May.

**ASSORTMENTS** People wanting special varieties will have to come early as our assortments get broken toward end of season. But most people want "JUST ROSES" when we use great care in giving strongest plants and sturdiest growers.

**WHERE TO PLANT** Pick out your heaviest, clay soil. Nowhere will roses be long lived in very sandy soils. Prune vigorously; the rose bears on terminals and you get more terminals when you prune and more flowers. Also plant roses together as they do better thus.

### PEACHES.

(*Amygdalus Persica*) The Persian or northern peach such as the Crawford, Elberta, etc., will not do well here. We must get a peach from a warm climate and such we find in the South China and Ceylon peaches and after trying out a number of varieties, we have settled down to three which do well here. These commence to blossom in January and if we have a late frost without heater protection, you will get very little fruit. Otherwise, the fruiting is very heavy and the flavor of these peaches is fine. The life of a peach north is rarely over a dozen years and it is no longer here. Hence plant a few every year.

Three thousand are now being grown for us in Florida and we will get in our first shipments early in December and advise December and January planting though they can be planted until April. Early orders will also get the largest trees.

**HONEY** Ripening end of May. Small, oval with deep suture on one side. Skin whitish yellow washed with red. Flesh creamy white, sweet, juicy and melting, a delicious flavor. Freestone.

**JEWEL** Ripening early in June. Medium, high-colored, sweet, juicy, freestone.

**RED CEYLON** Ripening end of June. Large size, color dull green with deep red blush, flesh blood-red. When fully ripe, this peach has the finest and strongest true peach flavor of any. Not only good for eating but also for cooking and preserving. It is so much better than the others that we would sell nothing else save that the others ripen earlier.

If assorted are ordered, there will be eight Ceylon and two each Honey and Jewel in a dozen.

**PRICES** 60c each, \$6.00 dozen, \$45.00 per 100.

### PLUMS.

(*Prunus Domestica*)

A few varieties of fine plums have fruited well here.

**EXCELSIOR** A medium sized, deep, wine-red plum with sub-acid, rich flavor.

**TERRILL** A large, yellow, meaty plum.

**PRICES** 75c each, \$7.50 dozen, \$55.00 per 100.

### **JAPANESE PERSIMMONS**

(Diospyros Kaki) This is one of the most delicious of fruits ripening in September. The trees are hard to get started, certain varieties die apparently without reason but others grow readily and fruit well and the fruit abundantly repays care. Most varieties have imperfect flowers and need the Gailey persimmon planted close to pollenize. Usually one Gailey will be sent with a dozen or half dozen trees.

**GAILEY** Small but good fruit. Tree useful for pollenizing.

**YEDDO ICHI** This variety has fruited splendidly for years here. Large, oblate fruit with smooth skin with dark red bloom, flesh dark brown, sweet, rich, crisp and edible when still hard.

**PRICES** \$1.50 each, \$15.00 dozen.

### **NUT TREES**

**PECANS** The Pecan is a sub-soil feeder. It has a tap root which must go down to water. The water should be anywhere from 10 to 25 feet down. If planted in newly irrigated ground where its tap root cannot get to water, it may live on the irrigation given to its surface roots but it will not thrive. If planted along a ditch through which water is run five or more times a year, it will get ample water and do well. But it is not an aquatic plant and if water is standing in the bar-pit most of the time, it will probably die. If planted where its tap root gets down to salt water, it will die.

If the water conditions are right, it will thrive tremendously require almost no attention and in three to five years commence bearing and in seven or eight years, be very profitable.

If one or two are wanted around a house, a good way is to put at least six feet of 4 inch drain pipe straight down near the tree, fill with gravel and then turn water down it about once a month. This gets the water right where the tree wants it and it thrives. See the tree planted in Mr. Couch's yard at Pharr.

If planted in orchard form, trees should be 40 to 50 feet apart or from 17 to 27 to acre. If planted in rows along canals, they can be 30 feet apart and thrive.

The best time to transplant pecans is from December 1st to February 15th. They can be successfully transplanted a month earlier and a month later than this period but earlier than November and later than March, it is risky.

Nothing but budded, paper-shell varieties should be planted as seedlings are uncertain both in quality or fruit and in bearing. Also it is better to have two or more varieties as they cross-fertilize better than self-fertilize. We have in nursery rows, three fine varieties, the Success, Pabst and Stuart which grow large, thin-shelled, fine-flavored nuts and we also have larger trees grown for us in one of the best nurseries in the south.

**PRICES** 1'—2' \$1.50 each, \$15.00 dozen, \$100.00 per 100; 2'—3' \$1.75 each, \$17.50 dozen, \$125.00 per 100; 5'—6' \$2.50 each, \$25.00 dozen, \$175.00 per 100.

**ENGLISH WALNUTS** The only English Walnuts planted in this section have been on either California Black or Northern Black Walnut roots and they are short lived and do not grow well. It is evident the soil temperature is too high for these roots to thrive.

We are now getting trees grown in Arizona and grafted on the Arizona desert root and bearing fine nuts. They are as yet a very promising experiment. Soil conditions, distance apart, etc. same as for pecans.

**PRICES** Franquette, one of the best French varieties \$7.50 each, Giant, an immense, fine-flavored nut, \$15.00 each.

**MACADAMIA** (*M. Ternifolia*) This is a very promising experiment from Australia. The tree is very ornamental with dense, dark green foliage peculiarly odd and beautiful. The hard-shelled nuts have a solid meat, very rich, oily and deliciously flavored. They require same water conditions as the pecan and have done well in California.

**PRICES** 4'—6' \$4.00 each, \$40.00 dozen.

### **GRAPES .**

Northern grapes belonging to the *Labrusca* class such as Concord, Niagara, etc., will grow here but not thrive and fruit.

California grapes of the *Vinifera* class, will grow well and fruit abundantly but soon die from root rot and phylloxera in the soil. Certain varieties which do not mildew can be successfully grown if grafted on resistant roots.

After twelve years of experimenting and after seeing 12 acres die from root rot and after testing out over 250 varieties, we have three or four which stand the soil, grow well and fruit abundantly. They are:

**LUKFATA or RIO GRANDE CONCORD** This is a large black grape of the finest Concord flavor and richness, making fine grape juice and a good shipper. Its growth is strong, endures heat, drought and cold, succeeds in our limy soil, not injured by mildew. The cluster is medium size, ovate, compact. The berries globular, large, persistent and do not crack. The pulp is very juicy, sweet and agreeable.

It has an imperfect flower and another variety should be planted near it or your bunches will be small. For this purpose use:

**VALHALLAH** A large, clear red, juicy grape of delicious flavor and a vigorous grower. Flowers at same time as Lukfata and will fertilize it.

**CLOETA** A smaller, black grape with large clusters and of delicious, sub-acid flavor. Fruits abundantly here. Perfect flower and does not need other to fertilize it.

**CHAMPENEL** A perfect flowering grape of nearly the same parentage as Lukfata and the same good qualities of cluster and berry but not as thoroly tried out. All fruit in June.

Several other varieties are being further tested before being offered for sale but these are thoroly tested out.

**PRICES** 50c per vine, \$5.00 dozen, \$35.00 per 100.

The last three will be sent by themselves but as Lukfata will not fruit well without Valhallah or other, at least one perfect flowering grape will be sent with two or more Lukfata ordered.



## CITRUS TREES

Balled citrus trees can be transplanted at any time. But it is not wise to transplant them here between November 1st and February 10th as they are apt to bud out and the bud is more tender to frost than hardened stock. But even in this time, they can be banked to heading and then will make roots during winter and start immediately with coming of spring. But planting prior to Oct. 31st, if good banking is done during winter, is very satisfactory.

We have between eight and ten thousand trees growing at La Granja of standard varieties which we are selling and are grading into three sizes;

PRICES	CALIPER	EACH	PR. DZ.	PR. 100	WEIGHT
	Less than $\frac{5}{8}$ ths.....	\$2.00	\$20.00	\$150.00	25 lbs.
	$\frac{5}{8}$ ths to $\frac{7}{8}$ ths.....	2.70	27.00	200.00	30 "
	1" and over.....	4.20	42.00	300.00	40 "
<b>PONDEROSA LEMONS</b>					
	$\frac{5}{8}$ ths .....	3.00	30.00		
	Sm. ....	1.00	10.00		
<b>KUMQUATS</b>					
	3 Year.....	4.50	45.00		
	Sm. ....	2.00	20.00		
<b>LIMES</b>					
	$\frac{5}{8}$ ths .....	3.50	35.00	250.00	
<b>CALMONDINS</b>					
	1" .....	4.50	45.00		
	Sm. ....	1.00	10.00		
<b>TANGELOS</b>					
	$\frac{5}{8}$ ths .....	3.50	35.00		

For Bare root trees for winter and spring planting, see SECOND catalog to be issued about December 1st. A postal will bring it to you. Many other plants will be listed in it with descriptions and time to plant, etc.

## PALMS

Balled and cured palms can be planted at any time of year. We have from ten to twenty thousand growing at Kingsville and five to ten thousand at La Granja. A complete list with descriptions will be in Second catalog to be issued about December 1st. But here the two main varieties are priced.

For near-by customers, we keep these palms in boxes which are charged at \$1.00 each and credited when returned. This is really the best way to handle them.

Palms are graded by caliper in inches which roughly corresponds to height of leaves in feet. But at least two-thirds of the leaves are cut off to transplant.

Canary or ornamental date, Fan or Washingtonia Robusta Palms.

PRICES	CALIPER	EACH	PR. DZ.	PR. 100	WEIGHT
	2"— 3" .....	\$2.00	\$20.00	\$150.00	30 lbs.
	3"— 4" .....	2.75	27.50	190.00	40 "
	4"— 5" .....	4.00	40.00	275.00	50 "
	5"— 6" .....	5.00	50.00	350.00	60 "
	6"— 8" .....	6.00	60.00	450.00	75 "
	8"— 10" .....	7.50	75.00	600.00	100 "
	10"— 12" .....	9.00	90.00	750.00	125 "

The Thread, Sabal, Pinto, Queen, Windmill, Blue, Honey and Wine palms cataloged in 2nd catalog to appear about December 1st. A postal will bring it.

## POMEGRANATES

(Punica Granatum) Valuable both as an ornamental shrub and for its fruit. The new shoots and leaves vary from light green to soft maroon and later the color is always a fresh yellow-green and the habit of the bush is pretty. Then it has bright red flowers and later a fruit the size of a large apple with hard shell and sub-acid pulp with many seeds. It makes a delicious drink and jelly. The Mexicans are very fond of it and its use is increasing commercially. It makes a valuable low wind-break. Absolutely hardy.

**DWARF** This does not grow more than 3 feet high and is a continual bearer of bright red flowers. The fruit is small but good. Delightful for bordering drives.

**FLOWERING** This has lovely flowers of crimson and white and of yellow. Its fruit is not nearly as good as that with the single flowers.

**WONDERFUL** A recent introduction of great merit. Large, highly colored and attractive fruit. Pulp a rich garnet, juice abundant and richly acid in flavor. Valuable for shipping north. Ripens in August and September.

**PRICES** Field-grown plants, balled. \$1.00 each, \$10.00 dozen, \$75.00 per 100.





## CITRUS TREES

Send for later Price List.

Cut shows loose skin  
and Segments of  
the wonderful

### NEW TEMPLE ORANGE

More planted last season  
in Florida than of any  
other variety for five years.

Cypress, Arbor Vitas and other Ever-  
greens.

Umbrella, Grevillea and other shade  
trees.

Guavas, Feijoa and other subtropical  
fruits.

Hibiscus, Oleanders and other flower-  
ing Shrubs, etc., in

## 2ND CATALOG

to come out in December. A Postal will  
bring it.

## LANDSCAPING

Personal attention given to early  
orders. In winter, many demands shorten  
time available.

See us early.

Ten to twenty thousand palms in  
Kingsville Nursery. Prices in 2nd  
Catalog.



Arizona Cypress.



Avenue of Canary or Ornamental Date Palms



A. Wayne Wood, Esq., Vice-President of the First National Bank at Brownsville, said after visiting La Granja: "I did not know there was such a beautiful place in our valley. I had not dreamed of it." And after talking with Mr. Pomeroy, he said: "I consider the horticultural work in testing trees and plants and in encouraging the planting of the valuable ones which for over ten years, Mr. Pomeroy, has been doing, as one of the most vital and important if not absolutely the most important now being done for our section's development."

La Granja Farm, the Association's Beautiful Testing Grounds, is one mile East of the Donna Railway Station and a little South of that. Visitors welcome.

#### ELTWEED POMEROY

of Donna, Texas

*"The Man Who Makes Our Valley Beautiful."*

Vice-President American Pomological Society

President Texas Horticultural Society

Vice-President Rio Grande Horticultural Society

Charter Member Burbank Society

This preliminary Catalog of Orchard Heaters Water-proof Bags. Thermometers, Supplies, etc. Strawberries Roses. Pecans and plants for fall and winter planting, will be followed by one for citrus, and other plants for February and spring planting. A postal will bring it to you.

## The Rio Grande Horticultural Association



*Eltweed Pomeroy President  
Donna, Texas*

### Pre-War Prices

1<sup>st</sup> Paid  
Donna, Texas  
Permit No. 1